



U.S. Department
of Transportation

**Federal Railroad
Administration**

REGULATORY OVERVIEW

(Revised)

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Office of Railroad Safety

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NOTES: Federal Docket Management System - Dockets established after October 7, 1998, are available in the Federal Docket Management System (FDMS) and can be accessed over the Internet at www.Regulations.gov. Detailed information is available at the Web site to assist in viewing documents. FDMS replaced DOT's Docket Management System (DMS), effective September 30, 2007. See 72 FR 54315. All dockets formerly contained in DMS have been migrated to FDMS.

RSAC Web site - See the Railroad Safety Advisory Committee (RSAC) public Web site for details on pending tasks at: <http://rsac.fra.dot.gov>. The public Web site contains all of the documents provided at RSAC meetings.

Acronyms

AAR	Association of American Railroads
APTA	American Public Transportation Association
FRA	Federal Railroad Administration
NPRM	Notice of Proposed Rulemaking
PHMSA	Pipeline and Hazardous Materials Safety Administration
RSAC	Railroad Safety Advisory Committee

SUMMARY OF ONGOING CONSENSUS RULEMAKING EFFORTS

Railroad Safety Advisory Committee

The last full Committee meeting was held on April 2, 2009. Since its first meeting in 1996, the RSAC has accepted 30 tasks. Below is a summary review of the RSAC initiatives to date. For complete information, see the RSAC Web site task section at the following link:

<http://rsac.fra.dot.gov/tasks.php>

Next RSAC meeting scheduled: **June 25, 2009.**

The list below is a summary of the current status of each open RSAC task. For more information and a more complete history on each task, please reference the “Regulatory Overview” dated September 28, 2007, at the following link: www.fra.dot.gov/downloads/Safety/regulatory_overview.pdf

Open RSAC Tasks

Task No. 96-4 Tourist Railroads

Open task to address needs of tourist and historic railroads. On April 1, 1996, the RSAC authorized the formation of a working group to monitor and assist completion of the steam locomotive regulations task. Planned future activities involve review of other regulations for possible adaptation to the safety needs of tourist and historic railroads.

Task No. 03-1 Passenger Safety Issues for the 21st Century

In 2003, the full RSAC agreed to accept the task of considering enhancements to the passenger safety standards (Passenger Equipment Safety Standards and Passenger Train Emergency Preparedness) based on ongoing research, development of detailed standards by APTA’s Passenger Rail Equipment Safety Standards (PRESS) Task Force, and other identified needs. The Passenger Safety Working Group established four task forces to focus on the following areas: Crashworthiness/Glazing, Emergency Preparedness, Mechanical–General issues and Mechanical–Safety Appliances, and Track/Vehicle Interaction. The Working Group established a fifth task force on General Passenger Safety in March 2006.

Emergency Preparedness

The Emergency Preparedness Task Force was established to identify issues and develop recommendations related to emergency systems, procedures, and equipment. Its consensus recommendations supported publication of an NPRM on August 24, 2006 (71 FR 50275) and a final rule on February 1, 2008 (73 FR 6370) on Passenger Train Emergency Systems, focusing on emergency communication, emergency egress, and rescue access systems. The Task Force met on October 17-18, 2007, and reached consensus on draft rule text for a follow-up NPRM on Passenger Train Emergency Systems, focusing on low-location emergency exit path marking, emergency lighting, and emergence signage. The Task Force presented the draft rule text to the Working Group on December 11-12, 2007, and the consensus draft rule text was presented to and approved by full RSAC vote during the February 20, 2008, meeting. At its meeting held May 13-14, 2008, the Task Force recommended clarifying the applicability of backup emergency communication system requirements in the February 1, 2008 final rule, and FRA

announced its intention to exercise limited enforcement discretion for a new provision amending instruction requirements for emergency window exit removal. The Working Group ratified these recommendations on June 19, 2008. Task Force met again on March 31, 2009, to clarify issues related to the follow-up NPRM raised by members. To the extent that rule text was modified to better reflect the intent of the Task Force, revised rule text will be presented for approval to the Working Group on June 8, 2009. No additional Task Force meetings are currently scheduled.

Mechanical General Issues and Safety Appliances

This action is based on recommendations of the Working Group that were approved by the full Committee on January 26, 2005. At the Working Group meeting of September 7, 2005, the task force presented additional perfecting amendments and the full RSAC approved them on October 11, 2005. An NPRM was published in the *Federal Register* on December 8, 2005 (70 FR 73069). Public comments were due by February 17, 2006. The final rule was published October 19, 2006 (71 FR 61835), effective December 18, 2006. (Completed)

Passenger Equipment Crashworthiness

The task force provided consensus recommendations on enhancing cab car and multiple-unit locomotive end frame strength that were adopted by the working group in September 2005. The full committee accepted the recommendations in October 2005. An NPRM on the Front-End Strength of Cab Cars and Multiple-Unit Locomotives was published in the *Federal Register* on August 1, 2007 (72 FR 42016), with comments due by October 1, 2007. A task force meeting was held September 9-10, 2008, to resolve comments on the NPRM. FRA prepared draft final rule text incorporating the resolutions made at the task force meeting and rule text was approved at the Working Group meeting on November 13, 2008. The rule text was then presented and was approved by vote at the December 10, 2008, RSAC meeting. The target publication date for the final rule is mid-2009.

Vehicle/Track Interaction

The task force is developing proposed revisions to Parts 213 and 238, principally regarding high-speed and high cant deficiency operations. The Task Force met on November 19-20, 2007, in Washington, DC, and presented a report, recommendations, and proposed rule text for approval by the Passenger Safety Working Group at the December 11-12, 2007, meeting. The report and the proposed rule text were approved by the Working Group, and the proposal was accepted by the full RSAC on February 20, 2008. FRA is currently preparing an NPRM with a target publication date of mid-2009.

General Passenger Safety

This task force began work on February 13, 2007. On August 8, 2007, it revealed proposed reporting codes for injuries involving platform gaps, which were approved by the Working Group by mail ballot during September 2007. The full RSAC approved the recommendations for changes to 49 CFR Part 225 accident/incident cause codes on October 25, 2007, and they were included in an NPRM published on September 9, 2008 (73 FR 52495). The task force also presented draft guidance material for management of platform gaps, which was considered and approved by the Working Group during the December 11-12, 2007, meeting and accepted by the full RSAC on February 20, 2008. The task force continues work on passenger train door securement, "second train in station," trespasser incidents, and system safety-based solutions by

developing a regulatory approach to system safety.

Task No. 05-01 Roadway Worker Protection

In 2005, the RSAC accepted a task to review 49 CFR Part 214, Subpart C, Roadway Worker Protection, and related sections of Subpart A. The RSAC agreed to recommend consideration of specific actions to advance the on-track safety of railroad employees and contractors engaged in maintenance-of-way activities throughout the general system of railroad transportation, including clarification of existing requirements. The working group was able to come to consensus on 32 separate items. However, prior to the full RSAC vote in June 2007, which confirmed working group recommendations on 31 of those items, two parties raised technical concerns regarding the draft language concerning one of those consensus issues: electronic display of track authorities. In addition, there were eight items discussed by the working group which led to valuable insight, but over which the working group was unable to come to consensus. FRA intends to address all the items discussed through two rulemakings: (1) a relatively compact rulemaking that will address adjacent track protection and (2) a longer, catchall rulemaking that will address all consensus items and be broad enough in scope to raise the non-consensus items for further discussion and comment. The decision to issue a separate adjacent track rule was due to an increase in roadway worker fatalities that occurred on adjacent track. Consequently, a draft NPRM to address adjacent track protection was published in the *Federal Register* on July 17, 2008, but due to concern that parts of the NPRM failed to accurately capture the consensus recommendations of the RSAC, the NPRM was withdrawn by FRA on August 13, 2008. FRA will address discrepancies between the consensus language and the adjacent track protection NPRM to clarify the essential issues, and intends to publish a second NPRM by August 31, 2009. FRA is also working on the longer, catchall rulemaking and plans to publish an NPRM in late 2009.

Task No. 05-02 Operating Rules (Human Factors)

The regulation on Railroad Operating Rules: Program of Operational Tests and Inspections; Railroad Operating Practices: Handling Equipment, Switches and Fixed Derails, aims to establish greater accountability for compliance with industry rules that address hazards underlying approximately half of the human factors-caused train accidents that occur each year, and many of the employee casualties. The rule includes critical safety management elements so that FRA field personnel have better tools to intervene before poor rules compliance leads to serious accidents. The working group was unable to deliver a consensus regulatory proposal, but did recommend that it be used to review comments on FRA's NPRM, which was developed with the benefit of the working group's discussion. The NPRM was published in the *Federal Register* on October 12, 2006 (71 FR 60371) with public comments due by December 11, 2006. The working group reviewed comments and developed recommendations that were presented to, and accepted by, the full RSAC at the June 26, 2007 meeting. The final rule was published in the *Federal Register* on February 13, 2008. FRA received four petitions for reconsideration of that final rule. The final rule that responded to the petitions for consideration was published in the *Federal Register* on June 16, 2008, and concluded the rulemaking.

The working group continues to work on after-arrival orders, and at its September 25, 2008, meeting voted to create a Highway-Rail Grade Crossing Task Force to review highway-rail grade crossing accident reports regarding incidents of crossing warning systems providing "short

or no warning” resulting from or contributed to “by train operational issues” with the intent to recommend new accident/incident reporting codes that would better explain such events, and which may provide information for remedial action going forward. A follow-on task is to review and provide recommendations regarding supplementary reporting of train operations-related, no-warning or short-warning incidents that are not technically warning system activation failures but that result in an accident/incident or near miss. The task force has been formed and is scheduled to begin work in 2009 as other priorities are met.

Task No. 06-01 Locomotive Safety Standards

After receiving a consensus recommendation from the RSAC, FRA revised 49 CFR Part 229 in regard to the existing requirements related to sanders on locomotives. The final rule was published in the *Federal Register* on October 19, 2007 (72 FR 59216), and became effective December 18, 2007. This rule modified the existing regulations by permitting additional flexibility in the use of locomotives with inoperative sanders. The rule provides railroads the ability to better utilize their locomotive fleets while ensuring that locomotives are equipped with operative sanders in situations where they provide the most benefit from a safety and operational perspective. The rule also makes the regulations related to operative sanders more consistent with existing Canadian standards related to the devices. The Working Group is continuing the review of Part 229 with work in the areas of locomotive cab temperature standards, alerters, remote control locomotives, and critical locomotive electronics with a view to proposing further revisions to update the safety standards.

Task No. 06-02 Track Safety Standards and Continuous Welded Rail

On February 20, 2008, the full RSAC accepted recommendations from the Track Safety Standards Working Group regarding amendments to Part 213 pertaining to continuous welded rail (CWR). The recommendations were incorporated into FRA’s publication of an NPRM on December 1, 2008 (73 FR 73077). The NPRM proposes specific requirements for the qualification of persons designated to inspect CWR track, or supervise the installation, adjustment, or maintenance of CWR track. FRA is also proposing to clarify the procedures associated with the submission of CWR plans to FRA by track owners. FRA proposes that these plans focus on inspecting CWR for pull-apart prone conditions, and focus more specifically on CWR joint installation and maintenance procedures.

Task No. 06-03 Medical Standards for Safety-Critical Personnel

In September 2006, the RSAC accepted a task to enhance the safety of railroad operations by establishing standards and procedures for determining the medical fitness for duty of personnel engaged in safety-critical functions. The employees to be covered include locomotive engineers, conductors, dispatchers and signalmen—those whose jobs directly affect the safe operation of railroads. The Medical Standards Working Group initially met in December of 2006 and met most recently on April 22-23, 2008. At the latter meeting, FRA announced that the agency would prepare an NPRM draft based on the discussions to date and schedule a further meeting for review of the document. The draft NPRM is currently in FRA coordination and will be presented to the Working Group when completed. A Doctors Task Force, established by the Working Group in mid-2007, is developing accompanying medical guidelines that will be used to provide consistent criteria for determining the medical fitness for duty of safety-critical positions. These guidelines will be presented for Working Group consideration when complete.

When accepted by the Working Group, the two parts of the rulemaking will be presented to the full RSAC for approval.

Task No. 07-01 Track Safety Standards

This task was accepted on February 22, 2007, to consider specific improvements to the Track Safety Standards and/or other responsive actions, supplementing work already underway on CWR specifically to: review controls applied to reuse of rail in CWR “plug rail”; review the issue of cracks emanating from bond wire attachments; consider improvements in the Track Safety Standards related to fastening of rail to concrete ties; and ensure a common understanding within the regulated community concerning requirements for internal rail flaw inspections. The tasks were assigned to the Track Safety Standards Working Group. The first Working Group meeting was held on June 27-28, 2007, and the group met again on August 15-16, 2007, October 23-24, 2007, January 8-9, 2008, and November 20, 2008.

Two Task Forces were created under the Working Group: the Concrete Ties Task Force and the Rail Integrity Task Force. The Rail Integrity Task Force initially met on November 28-29, 2007. Subsequently there have been five additional meetings, the last one held on February 3-4, 2009. Through the Task Force’s work, consensus has been achieved on bond wires and a common understanding on internal rail flaw inspections has been reached. More work, however, remains before a recommendation for possible regulatory action is made.

The Concrete Ties Task Force presented consensus language regarding concrete cross-ties to the Working Group on November 20, 2008. After its approval by the Working Group, the language was presented and approved at the December 10, 2008 RSAC meeting. FRA anticipates publishing the Concrete Cross-ties NPRM in June 2009 and the final rule before the statutory deadline in April 2010.

Task No. 08-01 Report on the Nation’s Railroad Bridges

This task was accepted on February 20, 2008, to report to the Administrator on the current state of railroad bridge safety management, update the findings and conclusions of the 1993 Summary Report of the FRA Railroad Bridge Safety Survey, and include recommendations for further action with a target date of November 3, 2008. The working group first met on April 24-25, 2008, with follow-on meetings held on June 12-13, 2008, and August 7-8, 2008. The working group presented and received approval on findings and a final report to the RSAC during the September 10, 2008 full Committee meeting, completing this task. (Complete)

Task No. 08-03 Track Safety Standards Rail Integrity

This task was accepted on September 10, 2008, to consider specific improvements to the Track Safety Standards and/or to take other responsive actions designed to enhance rail integrity. The Rail Integrity Task Force was created in October 2007 under Task 07-01. The Task Force initially met on November 28-29, 2007. Subsequently, there have been five additional meetings, the last one held on February 3-4, 2009. Consensus has been achieved on bond wire issues and a common understanding on internal rail flaw inspections has been reached; however, more work remains before a recommendation for possible regulatory action is made. The Task Force is focusing in particular on changes to 49 CFR 213.113, defective rails and remedial actions for rail defects, and 49 CFR 213.237, inspection of rail. The Task Force has recommended a study on

the effects of rail head surface and wear conditions on the integrity of rail flaw detection systems, and its next meeting is scheduled for June 16-17, 2009.

Task No. 08-04 Positive Train Control

This task was accepted on December 10, 2008, to provide advice regarding development of implementing regulations for Positive Train Control (PTC) systems and their deployment under the Rail Safety Improvement Act of 2008. The task included a requirement to convene an initial meeting not later than January 2009 and to report recommendations back to the RSAC not later than April 24, 2009. The PTC Working Group was created in December 2008 by Working Group member nominations from committee member organizations under Task 08-04 and the first meeting was held on January 26-27, 2009. Follow-on meetings have been held February 11-13 and 25-27, March 17-18, and March 31-April 1, 2009. The PTC Working Group developed and performed an errata review of draft PTC rule language in mid-April 2009 and the language was sent to the RSAC for vote to accept the language as the recommendation of the Committee to the Administrator on April 30, 2009, with a suspense date of May 8, 2009, for voting ballots. The PTC Implementation Plan Task Force was created under the PTC Working Group in April 2009 to develop a template for use by the railroad industry to meet PTC implementation requirements.

Task No. 08-05 Railroad Bridge Safety Assurance

This task was accepted on December 10, 2008, to develop a draft rule encompassing the requirements of section 417, Railroad Bridge Safety Assurance, of the Rail Safety Improvement Act of 2008 (Division A, Public Law No. 110-432). This Act directs the Secretary of Transportation to promulgate regulations, not later than 12 months after the October 16, 2008 date of enactment, requiring owners of track carried on one or more railroad bridges to adopt a bridge safety management program to reduce the risk of human casualties, environmental damage, and disruption to the Nation's railroad transportation system that would result from a catastrophic bridge failure. The Railroad Bridge Working Group created under Task 08-01 was directed to reconvene and the kickoff was held on January 28-29, 2009, with a follow-on meeting held on February 23-24, 2009.

Task No. 08-06 Hours of Service Record Keeping and Reporting

This task was accepted on December 10, 2008, to develop revised record keeping and reporting requirements for hours of service of railroad employees. The Hours of Service Working Group was formed in January, 2009, by member nominations from committee member organizations and the first meeting was held on January 22-23, 2009. Follow-on meetings were held on February 4-6 and 18-20, and March 23-25, 2009.

Task No. 08-07 Conductor Certification

This task was accepted on December 10, 2008, to develop regulations for certification of railroad conductors, as required by the Rail Safety Improvement Act of 2008, and to consider any appropriate related amendments to existing regulations and report recommendations for a proposed or interim final rule (as determined by FRA in consultation with the Office of the Secretary of Transportation and the Office of Management and Budget) by October 16, 2009. The Conductor Certification Working Group was formed by formal nomination procedures by Committee member organizations and work will begin as time and schedules permit in 2009

after other Congressional RSAC priorities are met.

Significant Regulatory Actions (non-RSAC)

ECP Brakes: Limitations of current braking systems contribute to human factors- and mechanical-caused train accidents. Technology is available to overcome those limitations. In FY 2004, FRA commissioned a study to determine how best to foster implementation of electronically-controlled pneumatic (ECP) brakes. The report of that study was completed in May 2007, and it brought with it the credibility conferred by an expert panel utilized to develop and review its findings. In August 2006, the Administrator released the study report and announced that FRA would be proposing significant regulatory relief as an incentive for investments in this life-saving technology. FRA proposed revisions to the regulations governing the power braking systems and equipment used in freight and other non-passenger railroad train operations in an NPRM published in the *Federal Register* on September 4, 2007 (72 FR 50820), and public hearings were held October 4, 2007, in Washington, DC, and October 19, 2007, near Chicago, IL. The proposed revisions were intended to permit and promote the implementation of the ECP brake systems in a safe and effective manner. The final rule was published in the *Federal Register* on October 16, 2008 (73 FR 61511) with an effective date of December 15, 2008. On December 5, 2008, a notice was published in the *Federal Register* delaying the effective date of the final rule to January 12, 2009 (FR 73-7470).

Tank Car Crashworthiness: FRA is working with PHMSA to develop and issue a rule to make tank cars authorized to carry poison inhalation hazard (PIH) materials substantially more likely to withstand derailment and collision forces without losing product. On April 1, 2008, FRA and PHMSA jointly published an NPRM in the *Federal Register* to require tank cars carrying poison inhalation hazard products, such as chlorine and anhydrous ammonia, to be equipped with puncture-resistance protection strong enough to prevent penetration at speeds of 25 miles per hour for side impacts and 30 miles per hour for head-on collisions. The comment period ended on June 2, 2008. On July 3, 2008, a group that included the American Chemistry Council, AAR, and the Chlorine Institute filed a petition for an interim rulemaking to address the need for interim tank car design standards during the rulemaking process. The Fertilizer Institute filed a separate petition of a similar nature. Based on the petitions, it was determined that such a rulemaking was needed and an interim final rule authorizing interim car construction was published on January 13, 2009 (74 FR 1769). A final rule implementing the initial proposal (with any changes from public comments) is anticipated by March 2010.

Routing of Certain Hazardous Materials: FRA worked with PHMSA to issue a rule on routing of PIH materials, certain explosives, and high-level radioactive waste. This rule addresses safety and security issues associated with this type of transportation by rail. The proposed rule was published December 21, 2006 (71 FR 76833). On August 3, 2007, President Bush signed into law the Implementing Recommendations of the 9/11 Commission Act, which included additional requirements that the Department was to include in the final rule. The interim final rule incorporating those requirements was published in the *Federal Register* on April 16, 2008 (73 FR 20751). After reviewing public comments, a final implementing rule was published on November 26, 2008 (73 FR 72181). The final rule requires rail carriers to compile annual data on certain shipments of explosive, toxic by inhalation, and radioactive materials, use

the data to analyze safety and security risks along rail routes where those materials are transported, assess alternative routing options, and make routing decisions based on those assessments. The final rule permits carriers the option of making the initial routing decisions by September 1, 2009, based on data from July to December 2008, or by March 31, 2010, if they provide advance notification and use full-year 2008 data. The expanded timeline will allow railroads to include in their risk analyses seasonal variations in the movement of certain types of hazardous materials. The final rule requires railroads to designate a single point of contact to simplify and facilitate coordination of routing issues with state, local and tribal governments and to work through state and regional fusion centers to exchange the needed information. Railroads are required to address en route storage and delays in transit of the covered materials. In addition, railroads are required to include as part of their routine, pre-trip inspection of placarded hazardous material rail cars an inspection for signs of tampering with the rail cars.

The agencies reviewed public comments and published a final rule in the *Federal Register* titled, “*Railroad Safety Enforcement Procedures; Enforcement, Appeal and Hearing Procedures for Rail Routing Decisions Pursuant to 49 CFR 172.820*” on November 26, 2008, with an immediate effective date. After publication, it was determined that under applicable Federal statutes, this document did not qualify for an immediate effective date. On February 12, 2009, FRA published a clarification that the rule was not effective until January 15, 2009 (FR 74-6995). The coordinated PHMSA, FRA and Transportation Security Administration regulatory effort will provide rail carriers and shippers with the tools necessary to securely transport highly-hazardous materials by rail.

Accident/Incident Reporting: On September 9, 2008, an NPRM was published in the *Federal Register* to amend 49 CFR Part 225 and the FRA Guide for Preparing Accident/Incident Reports, and seek written comments until November 10, 2008 (73 FR 52495). The NPRM would clarify and amend certain provisions of the existing regulations pertaining to railroad accident/incident recording and reporting. This rulemaking is intended to increase the accuracy, precision, completeness, and utility of railroad accident/incident records and reports, and correspondingly FRA’s accident/incident database. This new data would help FRA, organizations promoting safety on and around railroad property (such as the AAR’s Railroad Research Foundation), and suicide prevention agencies, assess safety problems and develop programs to decrease accidents and casualties, including the incidence of suicide by train. On September 10, 2008, during the 36th RSAC meeting, RSAC **Task No. 2008-02, Accident/Incident Reporting** was presented for acceptance. The task offered to the Committee for consideration was to review comments received on FRA’s NPRM and would have allowed the RSAC to make recommendations for the content of the final rule. The task was withdrawn at the meeting without RSAC acceptance. On November 24, FRA issued a notice announcing that, as a result of a request to do so, a public hearing would be held in connection with this NPRM on December 18, 2008, in Washington D.C.

SAFETY ADVISORIES/DIRECTIVES/BULLETINS

No.	Subject
Safety Advisories	
2009-01	<p>Side Sill Failure of ACF Center Flow Covered Hopper Cars. FRA is recommending inspection and, when necessary, repair of American Car and Foundry (ACF) Center Flow Covered Hopper Cars, when appropriate. These cars have a history of side sill failure. On April 16, 2008, FRA was notified that car CSXT 254526, an ACF Center Flow Covered Hopper Car, experienced a catastrophic side sill failure. Published 03/27/09 (74 FR 13507).</p>
2008-02	<p>Safety Appliance Securement, Potential Failure of Welded Hand Brake Supports on GVSR 200000 Series Flatcars. FRA issued this safety advisory to provide guidance concerning the inspection and repair of GVSR series flatcars that have been modified to add welded vertical hand brake supports. A catastrophic failure of the welded securement of the vertical hand brake support of a GVSR flatcar had occurred, resulting in the fatality of a railroad train crewmember. Published 12/03/08 (73 FR 73689).</p>
2008-01	<p>Damage to Intermediate Air Hose Connection. FRA issued this safety advisory because certain freight cars equipped with end-of-car cushioning (EOCC) devices may have damage to a 90-degree elbow connected to the train line angle cock. Published 04/16/08 (73 FR 20741).</p>
2007-04	<p>Locomotive Reservoir Tanks. In April 2005, FRA issued Safety Advisory 2005-02 in order to provide information to interested parties on the potential catastrophic failure of locomotive main reservoir tanks manufactured by R&R Metal Fabricators, Incorporated, and installed on General Electric Transportation System (GETS) locomotives. FRA Issued this document, Safety Advisory 2007-04, in order to provide updated information related to this issue. Published 12/07/07 (72 FR 70729).</p>
2007-03	<p>Railroad Bridge Safety. This notice recommends that owners of track carried on one or more railroad bridges adopt safety practices to prevent the deterioration of railroad bridges and reduce the risk of casualties from train derailments caused by structural failures of such bridges. Published 9/11/07 (72 FR 51898).</p>
2007-02	<p>Specialized Maintenance Equipment. This notice provides interested parties guidance on the proper application of existing statutory and regulatory requirements concerning self-propelled specialized maintenance equipment. Published 1/26/07 (72 FR 3907).</p>

No.	Subject
2007-01	Safety in Yards. This notice addresses the safety of shoving or pushing movements in yards, including those involving remote control locomotives. This advisory also addresses the behavior of employees on or about tracks. Published 1/18/07 (72 FR 2334).
2006-06	Center Sill Cracks. This notice provides interested parties information related to the potential failure (cracking and breakage) of the center sills on 89-foot flat cars used to haul containers of municipal solid waste service. Published 1/8/07 (72 FR 842).
2006-05	Passengers Boarding or Alighting from Trains. This notice recommends that each railroad operating passenger trains assess the rules, instructions, and procedures used to ensure that a train will not depart a station until all passengers successfully board or alight from the train, and ensure compliance with such rules, instructions, and procedures. Published 12/1/06 (71 FR 69606).
2006-04	ACF Stub Sills. This notice recommends that owners of tank cars equipped with the ACF Industries, Incorporated (ACF) 200 stub sill design, inspect and enhance the underframes in accordance with the procedures contained in ACF's Maintenance Bulletin TC-200. Owners should contact ACF for a copy of Maintenance Bulletin TC-200 and for clarification of procedures and any additional information. Published 5/5/06 (71 FR 26604).
2006-03	Center Beam Flat Cars. This notice provides interested parties information related to the potential failure of the welded attachment of vertical load dividers on certain center beam lumber flat cars. Published 5/4/06 (71 FR 26403).
2006-02	Plug Rail. This notice provides recommended practices for the testing, classification, and reuse of second-hand rail. The purpose of the safety advisory is to reduce the number of rail defects that occur when second-hand rail is used. Published 3/8/06 (71 FR 11700).
2006-01	Side Frame Castings. This notice provides the industry additional information on the potential catastrophic failure of certain railroad freight car side frame castings manufactured by National Castings of Mexico's Sahagun, Mexico facility and Buckeye Steel Castings' Columbus, Ohio facility. The purpose of this safety advisory is to recommend that the rail industry carefully inspect these specific side frames when equipped freight cars are in shops or on repair tracks. Published 3/8/06 (71 FR 11698).

No.	Subject
2005-04	Time-Sensitive Chemicals, Delivery. This notice advises shippers, consignees, and railroads of the dangers of allowing cars of “time sensitive” chemicals to remain undelivered beyond their anticipated date of placement and to recommend enhanced procedures to avoid such occurrences. Published 10/6/05 (70 FR 58503).
2005-03	Highway-Rail Crossings. This notice facilitates improved cooperation in the investigation of collisions at highway-rail grade crossings. Published 5/2/05 (70 FR 22750).
2005-02	Main Reservoir Tanks. This notice provides information on the potential catastrophic failure of locomotive main reservoir tanks manufactured by R&R Metal Fabricators, Incorporated, and installed on General Electric Transportation System (GETS) locomotives. Published 4/20/05 (70 FR 20632).
2005-01	Main Track Switches. This notice advises all railroads to review their operating rules and take necessary action to ensure that train crews who operate manual (hand-operated) main track switches in non-signaled territory restore the switches to their normal position after use. Published 1/13/2005 (70 FR 2455).
2004-4	Sleep Disorders. This notice addresses suggested measures that railroads and employees should utilize to prevent work-related errors and on-the-job accidents as a result of sleep disorders. Published 10/1/2004 (69 FR 58995).
2004-3	Importance of Restoring Failed or Malfunctioning Highway-Rail Grade Crossing Warning Systems to Proper Operation Without Undue Delay. This safety advisory supplements Safety Advisory 2002-01. Published 8/11/04 (69 FR 48904).
2004-2	Procedures for Handling Reports of Signal System Problems. This safety advisory addresses the importance of railroads having clear safety and response procedures for use in the event of reports of signal system problems. Published 8/10/2004 (69 FR 48560).
2004-1	Roadway Worker Protection. This safety advisory addresses protecting roadway workers from traffic on adjacent tracks and heightening awareness to prevent inadvertent fouling of track when on-track safety is not provided. Published 5/3/04 (69 FR 24220).
2003-03	Additional Information on Potential Catastrophic Failure of 100-ton Truck Bolsters from National Castings of Sahagun, Mexico. This advisory identifies another series of bolsters, AAR Identification B-2409 and National Pattern 52202, which pose a similar potential safety hazard to those referenced in Safety Advisory 2002-03. Published 11/24/03 (68 FR 65982).

No.	Subject
2003-02	Proper Use of Railroad Tank Car Excess Flow Valves. This advisory advises all persons involved in loading and unloading products from railroad tank cars that they cannot rely on internal excess flow valves to stop the flow of product except under the limited conditions for which these valves were designed and installed. Published 9/4/03 (68 FR 52626).
2003-01	Importance of Verifying Compatibility of Packaging Components when Haz Mat Commodity is Changed. This advisory recommends that all persons involved in the packaging and offering of hazardous materials verify the compatibility of all tank car components, such as valves and gaskets, to resist corrosion, permeability, premature aging, pitting, or embrittlement. Published 01/23/03 (68 FR 3304).
2002-03	Failures of 100-ton Truck Bolsters from National Castings of Sahagun, Mexico. This advisory recommends that all railroads and car repair shops adhere to the instructions provided in AAR's maintenance advisory and early warning letters. AAR has identified a list of cars that may be equipped with the bolsters. Published 12/30/02 (67 FR 79686).
2002-01	Importance of Clear Safety Procedures - Highway-rail grade crossing warning systems. This advisory addressed the importance of clear, precise and unambiguous railroad safety procedures to ensure the safety of highway-rail grade crossing warning systems or wayside signal systems that are temporarily removed from service. Published 1/23/2002 (67 FR 3258).
2001-3	Failures of Airbrake Angle Cocks from Ellcon-National. This advisory recommended the immediate replacement or installation of retrofit kit for Ellcon-National Model 7000 Thread-to-Thread and Model 7270 Thread-to-Flange Angle Cocks, at both ends of airbrake system. Published 05/01/01 (66 FR 21811).
2001-2	Structural Integrity of Cast Steel Draft Sills. This advisory establishes recommended minimal guidelines for inspection and operation of Trinity Industries covered hopper cars with draft sills manufactured by American Steel Foundries. Also guidelines if car is involved in derailment and/or found defective. Published 03/12/01 (66 FR 14432).
2001-1	Remote Control Locomotives. This advisory establishes recommended minimal guidelines for the operation of remote control locomotives. Published 02/14/01 (66 FR 10340).
2000-3	Switching Operations. This advisory provides safety practices to reduce the risk of serious injury or death both to railroad employees engaged in switching operations and to the general public. Published 11/2/00 (65 FR 65895).
2000-2	Signal Units. This advisory recommends replacement of certain components in Harmon Industries' "Electro Code 4" and "Electro Code 4 Plus" intermediate signal units. Published 6/2/00 (65 FR 35418).

No.	Subject
99-3	Securement of floor beam cross-members on RoadRailer trailers: Safety practices to prevent the highway tandem wheel on RoadRailer trailers from falling onto the rails on moving trains. Published 11/10/99 (64 FR 61377).
99-1	Lifting or jacking of railroad equipment: Safety practices related to lifting or jacking of railroad equipment in order to remove trucks or repair other components on a piece of railroad equipment which requires individuals to work beneath railroad equipment while it is raised. Published 6/16/99 (64 FR 32300).
98-3	Safe Use of Prescription and Over-the-Counter Drugs: Safety practices for the safe use of prescription and over-the-counter drugs by safety-sensitive railroad employees. Published 12/24/99 (63 FR 71334).
98-2	Emergency application of airbrakes: Safety practices to reduce the risk of casualties caused by failure to activate the available two-way end-of-train telemetry device (two-way EOT) to initiate an emergency brake application beginning at the rear of the train when circumstances require an emergency application of the train airbrakes. Published 6/5/98 (63 FR 30808).
98-1	Vision standards of certified locomotive engineers: Addresses the vision standards of certified locomotive engineers in order to reduce the risk of accidents arising from vision impaired engineers. Published 5/28/98 (63 FR 29297).
97-3	Authorization of train movements past stop indications of absolute signals: Safety practices to reduce the risk of accidents arising from conflicting train movements when train dispatchers and control operators authorize movements past a stop indication of an absolute signal. Published 9/18/97 (62 FR 49047).
97-2	Failure to properly secure unattended rolling equipment: Safety practices to reduce the risk of casualties from run away locomotives, cars, and trains caused by failure to properly secure unattended rolling equipment left on sidings or other tracks. Published 9/18/97 (62 FR 49046).
97-1	Protection of trains and personnel from hazards caused by severe weather conditions: Safety practices to reduce the risk of casualties from train derailments caused by damage to tracks, roadbed and bridges resulting from uncontrolled flows of water and similar weather-related phenomena. Note: This was amended on November 12, 1997, by revising the recommendations concerning the transmission of flash flood warning to train dispatchers or other employees controlling the movement of trains. Published 9/4/97 (62 FR 46794).

Directives	
97-1	Review of operational tests and inspection programs and review of train dispatching procedures in non-signaled territory: Safety practices to evaluate the integrity of all railroads' programs of operational tests and inspections to ensure that safety-critical information is accurately conveyed and acknowledged for operations in non-signaled Direct Train Control (DTC) territory. Published 6/30/97 (62 FR 35331).
97-2	Initiating emergency application of train airbrakes descending heavy grades: Safety practice to prevent run-away trains on heavy grades of 2 percent or greater by initiating emergency application of airbrakes whenever train speed exceeds maximum authorized speed by five miles or more. Published 2/27/97 (62 FR 9014).
Bulletins	
97-1	Loss of dynamic braking due to unintentional activation of emergency MU fuel-line cut-off device: Safety practices for certain locomotives equipped with emergency MU fuel-line cut-off devices located inside the locomotive control compartment at a location which enables the cut-off device to be activated unintentionally. Published 1/30/97 (62 FR 4569).

Unnumbered: Recommended safety practices for Direct Train Control Operations. Published 12/3/96 (61 FR 64191).